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1   1.   A computer-implement method of accessing multimedia information

2 stored in a multimedia document using a paper document, the method comprising:

3   receiving by a computer at least one identifier representative of at least one bar

4 code scanned by a user from among a plurality of bar codes printed on the paper document, each

5 bar code corresponding to a point in time in the multimedia document;

6   determining by the computer one or more time ranges based upon the at least one

7 identifier, each time range having a start time and an end time; and

8   determining by the computer one or more portions of multimedia information

9 corresponding to the one or more time ranges, wherein each portion of multimedia information

10 comprises information from the multimedia document occurring between the start time and end

11 time associated with the corresponding time range; and

12   outputting by the computer for play on the computer or a remote computer the

13 portions of multimedia information corresponding to the one or more time ranges,

14   wherein the step of determining one or more time ranges comprises one of:

15   determining a first time associated with a first identifier from among said

16   at least one identifier and determining a second time associated with a second identifier

17   from among said at least one identifier; or

18   subtracting a first time amount from a time value associated with the at

19   least one identifier to produce a first time and adding a second time amount to the time

20   value associated with the at least one identifier to produce a second time,

21   wherein the one or more time ranges comprises the first time and the

22   second time.

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1   2.   The method of claim 1 wherein:

2   the multimedia information comprises information of a first type and information

3 of a second type; and

4   the step of determining by the computer one or more portions of multimedia

5 information comprises determining at least one of information of the first type and information

6 of the second type from the multimedia document occurring between the first time and second

7 time.

1   3.   The method of claim 2 wherein the information of the first type is video

2 information and the information of the second type is at least one of audio information and

3 closed-caption text information.

4-8.   (Canceled)

1   9.   The method of claim 1 wherein the first time amount and the second time

2 amount are determined using information received from the user.

10-12. (Canceled)

13.   The method of claim 1 wherein performing the at least one operation comprises communicating by the computer the portions of multimedia information to a recipient.

1   14.   The method of claim 13 wherein outputting the portions of multimedia

2 information comprises communicating by the computer the portions of multimedia information

3 via an electronic mail addressed to the recipient.

1   15.   The method of claim 13 wherein outputting the portions of multimedia

2 information comprises communicating by the computer the portions of multimedia information

3 via facsimile.

1   16.   The method of claim 1 further comprising deleting by the computer the

2 portions of multimedia information.

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17.   The method of claim 1 further comprising printing by the computer a representation of the portions of multimedia information on a paper medium to generate a second paper document.

18.   The method of claim 1 further comprising storing by the computer the portions of multimedia information.

19.   The method of claim 1 further comprising:

receiving by the computer information indicative of selection of one or more additional identifiers from a set of identifiers printed on the paper document;

determining by the computer one or more operations based upon the one or more additional identifiers from the set of identifiers; and

performing at least one operation from the one or more operations on the portions of multimedia information corresponding to the one or more time ranges.

20.   The method of claim 19 wherein performing the at least one operation comprises ranking by the computer the one or more time ranges based upon contents of the portions of multimedia information corresponding to the one or more time ranges.

21.   The method of claim 20 wherein ranking the one or more time ranges comprises:

for each time range in the one or more time ranges, determining by the computer a relevance of a user-specified criterion with the portion of multimedia information corresponding to the time range; and

ranking by the computer the one or more time ranges based upon the relevance of the user-specified criterion with the portions of multimedia information corresponding to the time ranges.

22.   The method of claim 21 wherein the user-specified criterion identifies a topic of interest.

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23.   The method of claim 19 wherein performing the at least one operation comprises grouping by the computer the one or more time ranges into one or more groups based upon contents of the portions of multimedia information corresponding to the one or more time ranges.

24.   A system comprising:

at least one processor;

a memory operatively coupled to the processor, the memory storing program instructions that when executed by the processor, cause the processor to:

receive at least one identifier representative of at least one bar code scanned by a user from among a plurality of bar codes printed on the paper document, each bar code corresponding to a point in time in a multimedia document;

determine one or more time ranges based upon the at least one identifier, each time range having a start time and an end time; and

determine one or more portions of multimedia information corresponding to the one or more time ranges, wherein each portion of multimedia information comprises information from the multimedia document occurring between the start time and end time associated with the corresponding time range;

output for play on the computer or a remote computer the portions of multimedia information corresponding to the one or more time ranges,

wherein the one or more time ranges are determined by program instructions that when executed by the processor cause the processor to:

determine a first time associated with a first identifier from among said at least one identifier and determine a second time associated with a second identifier from among said at least one identifier; or

subtract a first time amount from a time value associated with the at least one identifier to produce a first time and add a second time amount to the time value associated with the at least one identifier to produce a second time,

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24   wherein the one or more time ranges comprises the first time and

25   the second time.

1   25.   The system of claim 24 wherein:

2   the multimedia document comprises information of a first type and information of

3 a second type; and

4   the program instructions when executed by the processor, cause the processor to

5 determine at least one of information of the first type and information of the second type from

6 the multimedia document occurring between the first time and second time.

1   26.   The system of claim 25 wherein the information of the first type is video

2 information and the information of the second type is at least one of audio information and

3 closed-caption text information.

            27-31. (Canceled)

1   32.   The system of claim 24 wherein the first time amount and the second time

2 amount are user-configurable.

            33-35. (Canceled)

1   36.   The system of claim 24 wherein the program instructions when executed

2 by the processor, cause the processor to communicate the portions of multimedia information to

3 a recipient.

1   37.   The system of claim 36 wherein the program instructions when executed

2 by the processor, cause the processor to send the portions of multimedia information to the

3 recipient via an electronic mail.

1   38.   The system of claim 36 wherein the program instructions when executed

2 by the processor, cause the processor to communicate the portions of multimedia information via

3 facsimile.

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1   39.   The system of claim 24 wherein the program instructions when executed
2 by the processor, cause the processor to delete the portions of multimedia information from the
3 multimedia document.

1   40.   The system of claim 24 wherein the program instructions when executed
2 by the processor, cause the processor to print a representation of the portions of multimedia
3 information on a paper medium to generate a second paper document.

1   41.   The system of claim 24 wherein the program instructions when executed
2 by the processor, cause the processor to store the portions of multimedia information.

1   42.   The system of claim 24 wherein the program instructions when executed
2 by the processor, cause the processor to: receive information indicative of selection of one or
3 more additional identifiers from a set of identifiers printed on the paper document, determine one
4 or more operations based upon the one or more additional identifiers from the set of identifiers,
5 and perform at least one operation from the one or more operations on portions of multimedia
6 information corresponding to the one or more time ranges.

1   43.   The system of claim 42 wherein the program instructions when executed
2 by the processor, cause the processor to rank the one or more time ranges based upon contents of
3 the portions of multimedia information corresponding to the one or more time ranges.

1   44.   The system of claim 43 wherein the program instructions when executed
2 by the processor, cause the processor to: for each time range in the one or more time ranges,
3 determine relevance of the portion of the multimedia information corresponding to the time
4 range to a user-specified criterion, and rank the one or more time ranges based upon the
5 relevance of the portions of multimedia information to the user-specified criterion.

1   45.   The system of claim 44 wherein the user-specified criterion identifies a
2 topic of interest.

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1   46.   The system of claim 42 wherein the program instructions when executed

2   by the processor, cause the processor to group the one or more time ranges into one or more

3   groups based upon contents of the portions of multimedia information corresponding to the one

4   or more time ranges.

1   47.   A computer program product for accessing multimedia information stored

2   in a multimedia document using a paper document, the computer program product comprising:

3   a computer-readable storage medium having stored thereon computer program

4   code, the computer program code comprising:

5   code for receiving by a computer at least one identifier representative of at

6   least one bar code scanned by a user from among a plurality of bar codes printed on the

7   paper document, each bar code corresponding to a point in time in the multimedia

8   document;

9   code for determining by the computer one or more time ranges based upon

10   the at least one identifier, each time range having a start time and an end time;

11   code for determining by the computer one or more portions of multimedia

12   information corresponding to the one or more time ranges, wherein each portion of

13   multimedia information corresponding to a time range comprises information from the

14   multimedia document occurring between the start time and end time associated with the

15   corresponding time range; and

16   code for outputting by the computer for play on the computer or a remote

17   computer the portions of multimedia information corresponding to the one or more time

18   ranges,

19   wherein the code for determining one or more time ranges includes one of:

20   code for determining a first time associated with a first identifier

21   from among said at least one identifier and determining a second time associated

22   with a second identifier from among said at least one identifier; or

23   code for subtracting a first time amount from a time value

24   associated with the at least one identifier to produce a first time and adding a

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25   second time amount to the time value associated with the at least one identifier to

26   produce a second time,

27   wherein the one or more time ranges comprises the first time and

28   the second time.

1   48.   The computer program product of claim 47 wherein:

2   the multimedia information comprises information of a first type and information

3 of a second type; and

4   the code for determining portions of the multimedia information comprises code

5 for determining at least one of information of the first type and information of the second type

6 from the multimedia information occurring between the first time and second time.

1   49.   The computer program product of claim 48 wherein the information of the

2 first type is video information and the information of the second type is at least one of audio

3 information and closed-caption text information.

50-54. (Canceled)

1   55.   The computer program product of claim 47 wherein the first time amount

2 and the second time amount are user-configurable.

56-58. (Canceled)

1   59.   The computer program product of claim 47 wherein the code for

2 outputting comprises code for communicating the portions of multimedia information to a

3 recipient.

1   60.   The computer program product of claim 59 wherein the code for

2 communicating the portions of multimedia information to the recipient comprises code for

3 communicating the portions of multimedia information via an electronic mail addressed to the

4 recipient.

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1   61.   The computer program product of claim 59 wherein the code for

2 communicating the portions of multimedia information to the recipient comprises code for

3 communicating the portions of multimedia information via facsimile.

         62.   (Canceled)

1   63.   The computer program product of claim 47 wherein the code for

2 outputting comprises code for printing a representation of the portions of multimedia information

3 on a paper medium to generate a second paper document.

         64.   (Canceled)

1   65.   The computer program product of claim 47 further comprising:

2   code for receiving information indicative of selection of one or more additional

3 identifiers from a set of identifiers printed on the paper document;

4   code for determining one or more operations based upon the one or more

5 additional identifiers from the set of identifiers; and

6   code for performing at least one operation from the one or more operations on the

7 portions of multimedia information corresponding to the one or more time ranges.

1   66.   The computer program product of claim 65 wherein the code for

2 performing the at least one operation comprises code for ranking the one or more time ranges

3 based upon contents of the portions of multimedia information corresponding to the one or more

4 time ranges.

1   67.   The computer program product of claim 66 wherein the code for ranking

2 the one or more time ranges comprises:

3   code for determining, for each time range in the one or more time ranges,

4 relevance of the portion of multimedia information corresponding to the time range to a user-

5 specified criterion; and

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6   code for ranking the one or more time ranges based upon the relevance of the

7 portions of multimedia information corresponding to the time ranges to the user-specified

8 criterion.

1   68.   The computer program product of claim 67 wherein the user-specified

2 criterion identifies a topic of interest.

1   69.   The computer program product of claim 65 wherein the code for

2 performing the at least one operation comprises code for grouping the one or more time ranges

3 into one or more groups based upon contents of the portions of multimedia information

4 corresponding to the one or more time ranges.

70-72. (Canceled)